

AMENDMENTS TO THE SPECIFICATION

Please replace paragraph 3, lines 11-22, on page 9 (which corresponds to paragraph [0043] of U.S. Patent Publication No. 2008-0190860) with the following paragraph:

In an embodiment, the temperature sensitive polymer is a single polymer, or a combination of polymers. Preferably, the temperature sensitive polymer is selected from the group consisting of poly(N-isopropylacrylamide) (poly(NIPAM)), co-polymers of poly NIPAM with other polymers such as polyacrylic acid, poly(dimethylaminopropylacryl-amide) or poly(diallyldimethylammonium chloride) (DADMAC), polyethylene oxide, poly propylene oxide, methylcellulose, ethyl hydroxyethyl cellulose, carboxymethyl cellulose, hydrophobically modified ethyl-hydroxyethyl hydroxyethyl cellulose, poly dimethylacrylamide/N-4-phenylazophenylacrylamide (DMAAm) and poly dimethylacrylamide/4-phenylazophenylacrylate (DMAA) and other related polymers, gelatine, agarose, amylase, agar, pectin, carragenan, xanthan gum, guar gum, locust bean gum, hyaluronate, dextran, starches and alginic acid. More preferably, the temperature sensitive polymer is methylcellulose or poly(NIPAM).

Please replace paragraph 7, line 31, on page 13 through page 14, line 5 (which corresponds to paragraph [0066] of U.S. Patent Publication No. 2008-0190860) with the following paragraph:

Preferably the polyelectrolyte is one or combination of the following polymers: chitosan, polyacrylic acid, polyacrylamides and derivatives thereof, polymethacrylic acid, polystyrene ~~sulfonate~~ sulfonate, ~~polysulfonamide~~ polysulfonamide poly(2-vinylpyridine) and others described in the Journal of Controlled Release, 15, 141 (1991) incorporated herein by reference, polysaccharides such as xanthan, carragenan, agarose, agar, pectin, guar gum and others described in Lapasin and Pricl, Reology of Industrial Polysaccharides: Theory and Application, Blackie Academic and Professional, 1994, incorporated herein by reference.

Please replace paragraph 2, lines 7-22, on page 15 (which corresponds to paragraph [0070] of U.S. Patent Publication No. 2008-0190860) with the following paragraph:

In still another embodiment of the invention, copolymers may be useful to aid in the adsorption of the stimulant sensitising agent to the particles. Copolymers are molecules that contain two or more different type of monomers. The two types of monomers may be alternated either

randomly, alternatively or in blocks. The use of block copolymers that contain one block that strongly adsorbs to the surface of the particles and another block that is sensitive to pH, temperature or light would be particularly useful. Examples of such polymers include: poly ethyleneoxide-poly propyleneoxide-poly ethyleneoxide triblock copolymers (such as Pluronics polymers manufactured by BASF). In this case the polypropylene oxide would enhance adsorption to particles particularly hydrophobic particles such as coal and coal tailings, while the poly ethyleneoxide blocks would produce steric repulsion at lower temperatures (near room temperature) and would tend to associate at higher temperatures resulting in aggregation. Other types of useful block copolymers are comb polymers, which have a backbone that enhances adsorption to the particles and teeth that are stimulus sensitive. One example of this type of polymer contains poly acrylic acid as the backbone and poly ~~ethylene~~ ethylene oxide as the teeth.